## Illinois History A Magazine for Young People Volume 59, # 1

## **Table of Contents**

Black Hawk: An Autobiography and Its Influence on Native American Equality (page 3)

Shaun K. Devlin

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

Ad Majorem Dei Gloriam: The Founding of Loyola University of Chicago (page 7)

Robert J. Diehl

University Laboratory High School, Urbana

Teacher: Adele Suslick

Max Beberman and the "New Math" (page 12)

Vaishnavi Giridaran

University Laboratory High School, Urbana

Teacher: Adele Suslick

St. Anthony's School: A School Not Forgotten (page 15)

Paige Johnson

All Saints Academy, Breese Teacher: Stephanie Garcia

Penicillin: "The Miracle Drug" (page 19)

Abby Klaus

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

Jacquy Pfeiffer and the French Pastry School of Chicago (page 23)

Hannah Leskosky

University Laboratory High School, Urbana

Teacher: Adele Suslick

Elmwood Public School (page 26)

Sarah Osmulski

Elmwood Elementary School, Elmwood

Teacher: Mary Ann Hanlin

Illinois Wesleyan University (page 29)

Jackie Owensby

Oregon High School, Oregon

Teacher: Sara Werckle

John Mason Peck, Zealot of Education (page 32)

Bryce Parsons-Twesten

Belleville Township High School West, Belleville

Teacher: Melissa Schmitt

Vashti McCollum: The "Atheist" Mom (page 36)

Lauren Piester

University Laboratory High School, Urbana

Teacher: Adele Suslick

Teaching with Technology (page 40)

Kirsten Ratermann

All-Saints Academy, Breese

Teacher: Stephanie Garcia

Schools Make a Difference (page 43)

Brooke Restoff

All Saints Academy, Breese

Teacher: Stephanie Garcia

Jubilee State College (page 47)

Jenna E. Schaefer

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

The Foster College of Business Administration: Redefining Education in Illinois (page 50)

Zachary P. Tilly

Washington Gifted School, Peoria

Teachers: Danielle Dies and Mindy Juriga

The University of Illinois and Engineering (page 54)

Anne Tracy

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

From the Flames, the Phoenix: The Physics Department at the University of

Chicago (page 59)

Andrew Weatherhead

University Laboratory High School, Urbana

Teacher: Adele Suslick

Yesterday, The Illinois Industrial University, Today, The University of Illinois (page 62)

Lindsay Wiegmann

All Saints Academy, Breese

Teacher: Stephanie Garcia

Black Hawk: An Autobiography and Its Influence on Native American Equality

Shaun K. Devlin

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

In the quote, "We will forget what has past—and may the watchword between the Americans and Saukenuks ever be—'friendship'", Black Hawk reflected on his autobiography's impact on the relationship between the Native Americans and the American settlers. Throughout the early 1800s, the American settlers continued moving westward, often coming into conflict with Native Americans. The American government manipulated many Illinois Native American tribes and took control of their land. The Saukenuk, a Native American tribe in Illinois, was one of the first to resent American conquest. Consequently, the Saukenuk chief, Black Hawk, wrote an autobiography expressing his opinions concerning the need for positive interaction between the Native Americans and the settlers. Because of Black Hawk's publication Black Hawk: An Autobiography, readers understand Native American rights and cultural development throughout the 1830s in northern Illinois.

Black Hawk was born in 1767 into the Saukenuk tribe, a large Native American group located where the Rock River joins the Mississippi, at the current city of Rock Island. At age fifteen, Black Hawk became chief of the Saukenuk tribe. Although chiefdom was a big burden, Black Hawk excelled in his duties. He gained experience in matters of tribal welfare and began to learn concepts of defense and provision of basic needs. Black Hawk realized the importance of qualities such as love and caring that ensured that trust was gained and unity was secured within the tribe. Although his tribe was not immediately affected by the settlers, they eventually forced the Saukenuk to sign

a treaty granting them all of the Saukenuk land. The sale of land was incomprehensible to Black Hawk, and he regretfully expressed, "Nothing can be sold, but such things can be carried away." Aware of the consequences if they did not cooperate, Black Hawk surrendered and paid the settlers. His leadership and deep understanding of the situation and the realization that war was a dangerous possibility kept the Saukenuk group united. His only nonviolent option was to present his ideas to the American settlers in literary form and warn the Americans of their cruel intentions. He wrote about the Saukenuk culture, including their customs, traditions, and rights. Black Hawk understood that, although the two cultures could not be mixed, they had to try to work together to form a better state. Black Hawk was determined to insert a Native American viewpoint into the thinking of the Illinois government during a time when Native Americans were thought insignificant. Black Hawk's constant perseverance to introduce Native American rights led to the publication of his autobiography in 1834, penetrating the prejudiced views of the American settlers.

Black Hawk's writing style contributed in a big way to the success of his book. By using common dialect of the settlers and Saukenuk words and phrases, Black Hawk created a satisfying mix of the two cultures. This allowed the Americans to comprehend his ideas while simultaneously receiving the Native American culture that was included. In the original title, Ma-Ka-Tai-Me-She-Kia-Kiak: The Life of Black Hawk, the cultural tie was present through the two languages within the title. The American terms in the book, including words such as "Sacs," "Saukies," "Socks," and "Sakis," demonstrated the settlers' language when referring to the Saukenuk tribe. To provide Native American flavor, Black Hawk included his personal views and linguistic characteristics. He

regarded American women as "squaws" and journalists as "village criers," as well as referenced cities as "big villages" and alcohol as "bad medicine". Black Hawk's cultural descriptiveness of the situation coaxed readers to understand his viewpoint. Furthermore, Black Hawk's decision to present his thoughts in writing portrayed him to be logical and unafraid of negotiation. Black Hawk's attributes initiated reliance between his tribe and the Illinois citizens that allowed them to understand Black Hawk's point of view, increasing the collaboration with Native Americans in Illinois.

Readers' reacted more favorably to Native American rights than before Black Hawk published his book. Black Hawk: An Autobiography remains one of the most accurate and complete records historians have on Native American and American settler interaction. What surprised the authorities and his audience most definitely was Black Hawk's ability to challenge the Illinois government, speaking for the entire Native American population. Black Hawk allowed citizens to see that his life was not that of a savage; instead, he was more comparable to a hero. Black Hawk succeeded in strengthening the Saukenuks and, with his tribe's support, changed the attitude of Illinois settlers. Apathy was replaced with respect and sympathy that allowed Americans to modify the future of Illinois by recognizing Native American influence. Native American rights were finally being considered a critical element in Illinois. Alongside this came an unexpected wave of publicity for Black Hawk. He was invited to several banquets as a guest of honor, and gifts were given to show appreciation for alerting the public of their errors. Black Hawk had saved Illinois from becoming an area of war and chaos, and instead he created a region of peace and equality.

During the 1830s in northern Illinois, Black Hawk published Black Hawk: An Autobiography, which encouraged readers understand the need for Native American equality and cultural understanding. Within a short time, his book became one of the most controversial and view-changing pieces of literary works in Illinois. Because of Black Hawk's autobiography, the government began to allow Native American input in laws and regulations. To this day, Black Hawk: An Autobiography is one of the most debated and revered materials in Illinois history. As Black Hawk said, and spent his whole life proving, "We can only judge what is proper and right by our own standards." By merging the beliefs and perspectives of the Native American and the American settlers, Black Hawk transformed Illinois history forever. [From Alliance Library System. "Black Hawk" http://history.alliancelibrarysystem.com/illinoisalive/authors.cmf (Sept. 1, 2005); William Boelhower, "Saving Saukenuk: How Black Hawk Won the War and Opened the Way to Ethnic Semiotics," <u>Journal of American Studies</u> (Dec. 1991); Nancy Bonvillan, Black Hawk: Sac Rebel; Peter Inverson, "Black Hawk." Illinois State University

http://college.hmco.com/history/readerscomp/rcah/html.ah010300blackhawk.com (Sept. 5, 2005); Mark Wallace, "Black Hawk's An Autobiography: The Production and Use of an "Indian" Voice." American Indian Quarterly (Fall 1994; Sarah Wesson, "A Biography of Black Hawk," Richardson-Slone Special Collections Center.

http://www.qcmemory.org/Qchistory/People/Black%20Hawk/black\_hawk.htm. (Sept. 8, 2005).

Ad Majorem Dei Gloriam: The Founding of Loyola University of Chicago

Robert J. Diehl

University Laboratory High School, Urbana

Teacher: Adele Suslick

On October 9, 1871, a fire that had started on the west side of Chicago swept through the city, destroying all in its path. Eventually, it approached the newly founded St. Ignatius College, later known as Loyola University. A year earlier, Father Arnold Damen had established the school on the west side of the city. When he realized the impending disaster, Father Damen supposedly rushed out to the front porch of the main building and began to pray. Miraculously, the wind shifted and saved the college from a fiery fate. Father Damen believed that divine providence had created the school and then protected it from the fire. In reality, a combination of factors led to the inception of the college: the demand for Catholic higher education, the lack of Catholic alternatives, the Jesuit presence in Chicago, and one priest' determination.

In mid-nineteenth century Chicago, the demand for Catholic higher education was increasing. Between 1830 and 1870, the population of Chicago had skyrocketed from 3,000 people to approximately 300,000. Many of these residents were Catholic immigrants from Germany and Ireland. When they came to Chicago, they wanted a Catholic education for their children. Although the number of Catholic grade schools and high schools had increased, there were no Catholic colleges for the graduates to attend.

St. Ignatius College filled the void for Catholic higher education in Chicago. The University of St. Mary of the Lake, run by the Diocese of Chicago, had opened in 1844, but closed twenty-two years later; it was, in fact, a seminary and only offered classes to train candidates for the priesthood. The next Catholic college in Chicago, DePaul

University, did not begin operation until 1898. Several Protestant colleges served the city at the time, including one run by the Methodists, Northwestern University. Yet Catholic parents were not eager to send their children to a Protestant university. Other Chicago colleges would not exist for another twenty years or more; the University of Chicago, for example, did not open until 1890. When St. Ignatius began operation, it was one of the few universities in Chicago at the time and the only Catholic one.

From 1840 onward, the Jesuits' presence grew in Chicago and they were in an excellent position to establish a college. They ran several churches including St. Francis Xavier and Holy Name. A Jesuit, James van de Velde, became Bishop of the Diocese of Chicago in 1849. The Jesuits thus had a following and the political influence to undertake major projects. The founding of St. Ignatius was part of the Jesuit expansion of higher education in major cities across the country. Around the same time, the Jesuits established colleges in Philadelphia (St. Joseph's University, 1851), Boston (Boston College, 1863), Buffalo (Canisius College, 1870), Detroit (University of Detroit, 1877), and Milwaukee (Marquette University, 1881).

In 1857, Father Arnold Damen transferred to Chicago. Even though he had the opportunity to run an existing parish, he set out to found his own, illustrating his entrepreneurial spirit. He first erected Sacred Heart Church, which was the third largest church in the country at the time, and then Holy Family Church. Damen went on to start eight elementary schools, a high school for girls, a parish hall, and a home for working girls. All along though, it seemed he wanted to found a university. His next major undertaking, therefore, was to raise money for a college. He appealed to people throughout the city and the country, even those outside the parishes, the usual sources for

funding. He became legendary in his fundraising tactics, even auctioning off a horse and buggy to help fund the college's construction, which began in 1867. Finally, on September 5, 1870, the school opened next door to Holy Family Church.

The school started small, with only thirty-seven students and four professors. The curriculum ranged from junior high school to graduate school level. Those who wanted to run shops or pursue business-related careers followed the "commercial track". College courses focused either on the classics (Latin and Greek) or on math and science. In the first 30 years, approximately 1,500 students matriculated at the university.

Around 1900, the demographics of the neighborhood surrounding St. Ignatius changed as new non-Catholic immigrants displaced Catholics. Parishioner support for the college, therefore, declined. School officials wanted to move the college to the north side of the city, but Bishop Feehan opposed relocation because DePaul University already served that area. His successor, Bishop Quigley was a graduate of a Jesuit college and endorsed the move. In 1905, Quigley approved the application for a parish and school in the Rogers Park neighborhood near the lakefront. Along with the move, the Jesuits added a law school and a medical school, and in 1909, they renamed the campus Loyola University of Chicago.

In conclusion, the Jesuits established Loyola University as a Catholic alternative for educating the large number of Catholic men in late-nineteenth century Chicago. Crucial to its inception was Father Arnold Damen. Although Loyola University officially severed its ties with the Catholic Church in 1971, the motto *Ad Majorem Dei Gloriam* ("For the greater glory of God") still calls students to serve others. [From S. M. Avella, This Confident Church; T. A. Baima, *A History of USML*. (Sept. 9, 2002)

<a href="http://www.vocations.org/history.htm">http://www.vocations.org/history.htm</a> (Oct. 3, 2005); "Catalogue of the Officers and Students of St. Ignatius College", 1871 (brochure); W. Cronon, <a href="https://www.vocations.org/history.htm">Nature's Metropolis;</a>
"Daily Order" (Nov. 1909). St. Ignatius Collegian, 9(1) (Nov 1909); S. J.

Diner, *A City and its Universities*; L. F. Goodchild, "The Mission of the Catholic University In the MIdwest, 1842-1980: A Comparative Case Study of the Effects of Strategic Policy Decisions Upon the Mission of the University of Notre Dame, Loyola University of Chicago, and DePaul University," unpublished doctoral dissertation, The University of Chicago, Chicago, Illinois; M. Grace, "Loyola University," in *The Encyclopedia of Chicago*; "Jesuit History," http://www.ignatius.org/jesuit\_history.aspx (Sept. 13, 2005); "Jesuit History: The Jesuits Establish St. Ignatius College" (June 13, 2002) http://www.luc.edu/jesuit/sj@lu.html (Oct. 2, 2005);

"The Jesuits and pre-1870 Chicago," (June 13, 2002)

http://www.luc.edu/jesuit/earlysj.html (Oct. 2, 2005);

H. J. Kerner, "Fr. Arnold Damen S.J., Pastor of the World's Largest Parish." *The Jesuit Bulletin*, 2-3 (Jan. 1941); H. C. Koening, "Loyola University Chicago," in <u>Caritas Christi Urget Nos: A History of the Offices, Agencies;</u> "Loyola's History,"

http://www.luc.edu/archives/loyolahistory.shtml (Sept. 5, 2005);

"Loyola University Chicago," in Four Year Colleges; W. J.

Onahan, "The Jesuits in Chicago," in <u>Silver Jubilee of St. Ignatius College</u>; <u>One Hundred Years of Knowledge in the Service of Man</u>; J. W. Sanders, <u>The Education of an Urban Minority</u>: Catholics in Chicago, 1892-1919; E. R.

Skerret, E. R. Kantowicz, and S. M. Avella, Catholicism, Chicago Style; T.

Welch, "Catholic Education in Chicago and Milwaukee 1840-1890," unpublished doctoral dissertation, Northwestern University, Evanston, Ill.]

Max Beberman and the "New Math"

Vaishnavi Giridaran

University Laboratory High School, Urbana

Teacher: Adele Suslick

Max Beberman, a University High School educator and University of Illinois professor,

played a pivotal role in the development of a new math curriculum during the 1950s and

the 1960s, and as a result, helped raise national standards in mathematics. He headed the

University of Illinois Committee on School Mathematics that significantly altered math

programs across the United States.

Beberman spent most of his career in Illinois. He was educated in Stuyvesant

High School in New York and earned a bachelor's degree at CCNY, a master's degree at

Rutgers, and a doctorate from Columbia University Teachers College. In 1950 at the age

of 25, he moved Illinois where he spent the rest of his life. There, his talent was

recognized immediately, and it was said that he could "teach math to a stone wall." He

called his teaching style "discovery learning" because he encouraged his students to

figure out why something worked.

Beberman's first step in changing the math curriculum was taken at the University

of Illinois). A group of teachers and professors headed by Beberman investigated typical

high school math programs and made observations and suggestions. This group, the

University of Illinois Committee on School Mathematics (UICSM), was funded by the

Carnegie Corporation and by the United States Office of Education. The University of

Illinois also conducted the University of Illinois Arithmetic Project that focused on the

mathematical education of children in grades one through six. The purpose of this study

was to determine whether schools were setting proper standards for students at an early age. A different group of professors conducted this project but used UICSM data.

Beberman recognized a need for more mathematicians during the 1950s and 1960s. Technological improvements were forcing mathematicians and scientists to obtain advanced training. In addition, computers were creating new jobs in industry, and many of these jobs required creative thinking in mathematics. If high schools were unable to adequately prepare students for college, few would be willing or able to pursue higher education. Ultimately, science and industry in America would suffer.

Advocates of Beberman's New Math believed that students learn by understanding *why* something is correct rather than by simply being told the right answer. In one experiment, researchers introduced quadratics to children in first grade, and found that the subjects gained deeper understanding by how the subject was taught. Students, moreover, retained this knowledge when proceeding to more advanced topics.

Proponents of New Math also saw improvements in students who did not do well in math before.

After the Soviets launched *Sputnik* in 1957, Congress raised math standards. The American press thought the success of the *Sputnik* satellite reflected poorly on the quality of math and science education in American public schools. Congress subsequently passed the 1958 National Defense Education Act six years after Beberman's UICSM study. The National Science Foundation also provided millions of dollars for math education, which led to the creation of the Commission of Mathematics, the Regional Education Laboratories, and the National Institute of Education. The number of science, math, and foreign language majors increased as a result.

Max Beberman died in early 1971 at the age of 45, but his work is still remembered. In 1966, he had visited the Mayo clinic for a heart valve replacement, but failure of the valve led to his death in 1971. Robert Davis subsequently took over the UICSM and stressed the importance of the psychology of learning as well as logic and proofs in math education. [From David Klein, "A Brief History of American K-12 Mathematics Education." <a href="http://www.csun.edu/~vcmth00m/AHistory.html">http://www.csun.edu/~vcmth00m/AHistory.html</a> (Sept. 12, 2005); Ruth Moss, "The New Math." <a href="https://www.csun.edu/~vcmth00m/AHistory.html">Chicago Daily Tribune</a> 16 May 16, 1962; Ralph A. Raimi, "Chapter 1: Max,"

<a href="http://www.math.rochester.edu/people/faculty/rarm/beberman.html">http://www.math.rochester.edu/people/faculty/rarm/beberman.html</a>>.

(Aug. 30, 2005); Ralph A. Raimi, "Chronology,"

http://www.math.rochester.edu/people/faculty/rarm/chron.html (Sept. 9, 2005).]

St. Anthony's School: A School Not Forgotten

Paige Johnson

All Saints Academy, Breese

Teacher: Stephanie Garcia

You may not recognize the Catholic schools today since something seems to be missing--

the nuns. Nuns were the first educators in the Catholic schools. However, today we see

mostly lay teachers, and maybe a nun here or there.

In Beckemeyer, Illinois, a town not far from where I live stood a church and

school called St. Anthony. On October 2, 1905, Reverend Joseph J. Hoellmann, (the first

pastor) was given instructions to immediately create a building which would include a

church and school. Records indicate that the ground was purchased from John G.

Taphorn and Louisa Taphorn. The building was quickly built. As a result, the

church/school was officially dedicated on December 21, 1905.

The church was a two-story building. The school occupied the first floor, while

the second floor was for celebrating Mass and prayer services. The estimated building

cost, including furniture, was \$17,753.34. The school was divided into three rooms.

The Sisters of the Poor Handmaids of Jesus Christ were the first teachers at St.

Anthony's School, which officially opened on January 2, 1906. Enrollment began with

approximately 125 students. The teachers included Sister Kineburga, Sister M. Leonara,

and Sister M. Isabella. Another important educator at St. Anthony's Catholic School was

Sister Barbara Bruns. She remained active in the teaching staff and role of principal for

years until the school closed in 1994. In a previous documented interview, Sister Burns

stated, "I love children and find it a tremendous challenge to help them learn, build self-

esteem and healthy attitudes and values. My deep hope and prayer is that they will grow

in their relationship with God." Sister Barbara Bruns taught until 2003 when she retired from Mater Dei High School in Breese, Illinois.

Since the school was Catholic, St. Anthony was faith based. For this reason, families sent their children to receive a solid religious education. Parents noted that they liked the freedom to choose their child's education. Teachers at the school noted, "We liked the freedom to pray and celebrate the eucharistic liturgy with our students; freedom to speak freely of God in their classrooms; freedom to remind students of their dignity as children of the Heavenly Father; freedom to guide their students to a deeper and fuller Christ-centered life; and freedom to prepare their students to face existence in two worlds-here and hereafter." This faith-based education continues in our Catholic schools today.

Many of my relatives attended St. Anthony's School, including both of my grandmothers, my aunt, and my father. Recently, I spoke to them about their school experiences. They explained they felt they received an excellent education at St. Anthony's. My grandmother loved the fact that I was writing about her old school and she was more than willing to share any information she could remember. She explained to me that, "Everything I learned in Religion back then is still with me today." One of my grandmothers graduated in the year 1945 and the other in 1952. Both my aunt and my father graduated in 1972.

All of the individuals interviewed noted that they enjoyed the school immensely.

The classes were challenging and they spoke of nothing but positive experiences while attending St. Anthony. My grandmothers spoke of plays that each class performed.

Aunt Peggy noted that even though class sizes were very small, everyone got along well.

My father indicated the hot lunch program did not begin until 1971. Before that, students brought brown bag lunches, or the town children went home to eat. As they talked about fond memories, they were most thankful for their religious foundation that they received at St. Anthony.

The cost of tuition must have been different at different time periods. My grandmother told me the tuition was free when she attended the school, because many families were very poor. In an interview with Sister Bruns, she stated, "St. Anthony's was not a wealthy parish, so tuition was kept to \$400.00 a year per family."

As a result of decreased enrollment, increased finances and the need for extensive renovation, St. Anthony closed its doors in 1994. At the time of the closing, there were 80 students, with four teachers on staff. A special ceremony was held for students, parents, teachers, and the faith-based community on June 5, 1994, to celebrate its present and past memories. St. Anthony's School joined with All Saints Academy in Breese, Illinois, in the fall of 1994.

On February 27, 1997, three years after the school closed, demolition of the school building began. As a special memory of the physical building, my grandmother had the opportunity to obtain a brick. For others who were not so lucky, memories will continue in the hearts of those that had the opportunity to attend.

In remembrance of the school, a prayer to St. Anthony was written. It read, "St. Anthony Patron of Our Parish and our school, finder of misplaced things, help us find ourselves, and in our search for Christian education for our youth. Thanks, dear friend for the guidance through ninety years, and please dear saint, stay with us." The building of St. Anthony's School was awarded a landmark plaque by the Clinton County

Historical Society for 1981. [From Breese Journal, Dec. 16, 1982; Clinton County Historical Society, quarterly newsletter, vol: 20, no. 3 (July-Sept. 1997); student historian's interview with Stephanie Garcia (author's teacher), Oct. 24, 2005; student historian's interview with Peggy Gebke (former St. Anthony's student), Sept. 30, 2005; student historian's interview with Ruth Gebke (former St. Anthony's student), Oct. 12, 2005; student historian's interview with Evelyn Johnson (former St. Anthony's student), Oct. 3, 2005; student historian's interview with Kenneth Johnson, (former St. Anthony's student), Oct. 1, 2005; "The 1913 Commercial History of Clinton County, Illinois, Beckemeyer" <a href="http://www.rootweb.com/~ilclint2/commer/beck.htm">http://www.rootweb.com/~ilclint2/commer/beck.htm</a> (Sept. 13, 2005); "The 1913 Commercial History of Clinton County Illinois, Beckemeyer" <a href="http://www.rootsweb.com/~ilclint2/commer/beck.htm">http://www.rootsweb.com/~ilclint2/commer/beck.htm</a> (Sept. 13, 2005); and unidentified newspaper, January 29, 1978.]

Penicillin: "The Miracle Drug"

Abby Klaus

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

In agricultural production and technology, the United States has always been a worldwide leader. Agriculture is a major industry in Illinois, and as a result, agricultural research has been extremely beneficial to this state. Important contributors to agriculture research include the United Stated Department of Agriculture (USDA), and its research laboratories like the one in Peoria, Illinois, and the National Center for Agricultural Utilization Research (NCAUR). The famous production of penicillin is an example of how the NCAUR impacted Peoria. One important discovery, the production of penicillin, began in England and ended here. Because of the development of penicillin, one of the most well known scientific discoveries, the National Center for Agriculture Utilization Research lab influenced Peoria.

Peoria was chosen for the Northern Lab because the location was in the middle of agricultural production. The main motivation was to seek alternative usage of surplus crops. In the 1930s farmers had crop surpluses because demand was low. Mechanization had increased agricultural production. Congress then authorized means to end the farm depression. Meanwhile, scientists conducted research on corn, wheat, and agricultural waste. Even though the agricultural lab had a slow beginning, the tasks ahead influenced Peoria forever.

At St. Mary's Hospital in England, a penicillin spore apparently blew in the window; the bacteria landed in a bacteria culture and never developed. This unexpectedly became the introduction of penicillin. Scientist Alexander Fleming

discovered a mold and in 1928 later identified penicillium notatum to have great bacteria-killing capabilities. Research on the drug continued in England until 1940. Constant wartime bombings by the Nazis forced cessation of experimental work. Because of this, two British scientists were dispatched to the United Stated to find a place where experimentation could be continued. Wartime pressures and fear that the Germans might rob the English of penicillin brought scientist Howard Florey to Illinois, with freeze-dried strains of Fleming's mold. They selected the Peoria laboratory and the research goal was to make penicillin commercially practical. After this, a number of Peoria staff immediately started to work on methods of producing a greater yield of penicillin from the mold. In order to achieve this, further research investigated dairy products. Scientists finally developed the method for producing the drug in large quantities. Fifteen pharmaceutical manufacturers later produced the drug using the process developed in Peoria. As a result of scientists choosing Peoria, Illinois, the study of the precious mold, penicillin began.

A significant part of research was collection of any and all food molds found at supermarkets in Peoria. One contributor to the research, Mary Hunt, also known as "Moldy Mary," had a concentration of penicillin spores found on cantaloupe. There was controversy over where the moldy cantaloupe actually came from. Furthermore, lactose, otherwise identified as milk, sugar, and essential salts, are included in the diet of penicillin. Extracted, the penicillin was frozen and then evaporated with high vacuum machines; the outcome was a yellow powder, which was the finished product. Dr. Coghill later defined penicillin as a "bright yellow chemical produced by mold grown on

a sugar solution." The Peoria laboratory isolated superior strains of the mold and British scientists made the decision to continue research on penicillin in Peoria.

The Peoria laboratory had one of the largest collections of mold and microorganisms, of which 2,000 were molds. Fleming's discovery of penicillin has been recognized as both accident and miracle because the mold "appeared from the air". British and American laboratory technicians, along with twenty scientists, succeeded in increasing penicillin yield more than 100 times. In three years, development and growth of the drug-producing mold was accomplished. Continued research increased its production 100 fold. Experimentation at the laboratory not only increased the production of the mold, but scientists there have improved the strains. Penicillin was later named the cheapest antibiotic ever. People no longer died from common infections like bacterial pneumonia. Infections like pneumonia and gangrene were no longer deadly due to commercial development and production.

"The penicillin research done is probably the most significant medical and humanitarian project ever carried on at the lab in terms of benefits," according to Dr. William Tallent, director of the laboratory. He also stated that the small number of scientists involved in the research was very significant because the drug had a positive outcome. With penicillin, patients slowly dying were now cured within two to four weeks. Bone infections responded almost magically to the treatment in various hospitals located a short distance from the lab. Refined, the drug became a white powder, which was made available to the armed forces. After commercial drug production, it became available to 2,100 hospitals. Some of penicillin's most beneficial aspects include its avoidance of a toxic condition. Most of the drug was used for the armed forces although

it was possible for a physician, upon application though proper channels, to obtain it for a few small illnesses. Sick soldiers in the United States Army were treated and this gave Peoria a certain renown. The National Center for Agricultural Utilization Research's miracle drug has saved numerous lives and has since discovered other pharmaceutical uses for agricultural products.

One of the most well known scientific discoveries, penicillin impacted Peoria in a lab named the National Center for Agricultural Utilization Research (NCAUR). Since 1940, the NCAUR in Peoria has become the largest of four regional laboratories. Also, NCAUR has accomplished more than its original mission of offering assistance to American farmers. Penicillin is probably the most beneficial drug Illinois has ever experienced. Without the production of penicillin, Illinois might not have been able to achieve the goals and successes that occurred. Today, the laboratory is located at 1815 North University Street with tourists wanting to know about the epic event everyday. [From "Illinois Periodicals Online" Northern Illinois University Libraries. 31 http://www.lib.niu.edu/ipo/aboutiop.html (Aug. 31, 2005); "Lab" Leaders Confer Here With Dr. May," The Journal Star, May 9. 1944; Mark Lambert, "Northern Regional Lab Honored For Work With Penicillin." The Journal Star, Sept. 6, 1980; "Local Laboratory Aids Wonder Drug." The Journal Star, Aug. 1, 1944; "Miracle Drug Produced Here," The Journal Star, June 17, 1943; "Peoria Laboratory Makes Penicillin, 'Magic' Drug." The Journal Star. June 17,. 1943; "Story of Peoria's Part in Penicillin Production Told." The Journal Star, June 17, 1944. Jacquy Pfeiffer and the French Pastry School of Chicago

Hannah Leskosky

University Laboratory High School, Urbana

Teacher: Adele Suslick

Fresh bread bakes in the oven, fruit tarts and delectable cakes line the counters, sculptures

crafted of sugar and chocolate grace the center of a table, and creamy sorbet and ice

cream cool in the freezer. This is not a gourmet restaurant kitchen. It is Jacquy Pfeiffer's

classroom.

There are many types of educators and Jacquy Pfeiffer leads the way in the art of

making pastry. A pastry chef prepares baked desserts from basic ingredients like flour,

water, sugar, and shortening. This once obscure and seemingly unglamorous profession

is now one of the most respected culinary arts. Today, pastry chefs find work in small

corner bakeries or five-star restaurants because people want elegant desserts and not

mass-produced frozen food. In fact, a pastry chef may share equal rank with the head

chef, even collaborating on the flavors used for an entire meal. Pastry chefs have hosted

cooking shows, written cookbooks, and even established schools to train new pastry

chefs.

Jacquy Pfeiffer, co-founder of the French Pastry School in Chicago, is one such

chef-turned- educator. Pfeiffer has worked with pastry his whole life, beginning at age

fifteen when he apprenticed in a pastry shop in Strasbourg, France. Realizing his love for

preparing pastry, he decided to make it his life's work. He studied food technology at

Baldung Grien College in France where he was named "Best Apprentice". After

graduating, he refined his skills by working in a series of celebrated pastry shops in

Alsace, France, including Chocolaterie Egli and Patisserie Naegel. Soon his culinary

talent took him beyond the borders of his native country. He served as head pastry chef for the richest man in the world, the Sultan of Brunei, and then worked as top pastry chef at the Hyatt Regency in Hong Kong. Eventually, he realized that the greatest opportunities awaited him in the United States, and he moved to Chicago in 1992 to become pastry chef at the Fairmont Hotel. That same year he won the title "Best Pastry Chef in America" and went on to win it again in 1996 and 1997. Subsequently, he has worked at the new Sheraton Chicago Hotel and Towers. Since arriving in the United States, he has collected many other awards in pastry competitions both national and international.

Perhaps his greatest accomplishment, however, is the French Pastry School, which he founded in 1995. He joined forces with Sebastion Cononne, a long-time colleague in the pastry business, to create the school. "The focus of the French Pastry School is to share knowledge and focus on imparting to students the latest food technology and simplified production methods," Pfeiffer stated. He selected Chicago for his culinary school because none existed there at the time. His syllabus covers specialty cakes, regular cakes, bread, petits fours, tarts, ice cream, sorbets, and chocolate candy. Other courses include the business end of the profession as well as competitive cooking and food service sanitation. Now in its tenth year, the school by all accounts is a success, even winning the prestigious Jean Banchet Award, which recognizes outstanding culinary schools.

Jacquy and Sebastion are not just the owners of the school. They teach in the classroom on a daily basis, and they use their own experiences to educate others about the pastry business. These two Frenchmen have shortened the venerable European tradition

of lengthy apprenticeship into an intensive six-month curriculum called "L'art de la Patisserie". Even after graduation, Pfeiffer and Cononne offer their students guidance and support as they fulfill their pastry dreams.

Students at the school come from all walks of life. Some are policemen and some are housewives; however, it takes more than just an interest in pastry to be a pastry chef. One has to be ready to do the same thing over and over again and to be very exact. A steady number of people is willing to put in the effort, and thanks to Jacquy Pfeiffer and his colleague, Americans have had an opportunity to enter a profession that is prestigious, lucrative, and best of all, has delicious results. [From Jacqueline Dulen, "Sweetness and Light" Restaurants and Institutions. http://80-firstsearch.ocic.org.proxy2.library.uiuc.edu/webz/PTFETCH?SESSION (Sept. 1, 2005);

Jacquy Pfeiffer. http://www.frenchpastryschool.com (Aug. 31, 2005);

Jacquy Pfeiffer—Team Manager and Judge 1. http://www.pastrychampionship.com (July 6, 2005); Polly Lattue, "Sweet Profits"

http://80-firstsearch.ocic.org.proxy2.library.uiuc.edu/webz/FTFETCH?SESSION (Sept. 1, 2005). ]

Elmwood Public School

Sarah Osmulski

Elmwood Elementary School, Elmwood

Teacher: Mary Ann Hanlin

Elmwood's educational system began because the town was founded. Elmwood has had

a private school titled Elmwood Academy and about fifteen pay schools. The first public

school came after those schools and was the first tax-supported school in the area.

The Academy, established in 1854, did not last long. Though it flourished under

competent management, it never was able to get tax support. Sadly, the Academy was

closed due to the building of the first public school.

Pay schools more commonly known as "schoolhouses," existed all over the

Elmwood area. Many no longer exist, although some have been converted into private

homes.

Elmwood Public School was first built in 1866. It was the first tax-supported

school in the area. The building had a wooden frame and was three stories tall. It housed

five classrooms, a library, and a recitation room. Housing both elementary and high

school, it cost about \$20,000.

The first high school class graduated in 1872. The number of graduates changed

each year. In 1895 a fire destroyed the public school. Immediately a brick building was

planned and completed by 1896. It was three stories tall and had everything needed at a

cost of \$28,000. The architect was John M. Baillie. Before it was built, there was a debate

whether the building should be at the same location as one unit or three buildings at

different locations. It was decided to build one building at the same location as before.

The grade school owned the building, but the high school rented part of it for classrooms.

In 1921, due to the Smith-Hughes Act, a classroom and laboratory were constructed for the agricultural department. The department continues today.

Edson Smith, a local businessman, gave land to the school in 1917. The land was to be used for athletic purposes. It would become a permanent athletic facility.

A gymnasium was needed and was built across from the school. It was completed in 1928 and contained a regulation basketball court, boardroom, a stage, dressing rooms, and a kitchen at the cost of \$35,000. It is currently a Community Center and Health Club.

Due to the gymnasium, space was not as big a problem as before. In the 1940s the state decided to close all of the smaller rural districts because a centralized public school served better. Student enrollment then soared from 191 to 352 due to this act. Oak Hill's grade school, the last one–room schoolhouse in the county, was combined with Elmwood in 1963.

Since there were many children enrolled in the school, the high school agreed to build another building, separate from the grade school. The land had enough space for an athletic field, and was completed by the 1953-1954 school year. After the high school moved into the new building, the grade school was remodeled to meet the expansion needs. Additional classrooms were provided due to amount of students enrolled.

The high school and grade schools were brought together as one district in 1969-1970.

The Elmwood Community District No. 322 had about the same rules as the former high school district. In 1973 the grades 5-8 from Edwards were moved to Elmwood. New classrooms were built at the side of the grade school. In 1981 Edwards Grade School was closed, and the rest of the school was transported to the Elmwood grade school.

The seventh and eighth grades of Elmwood were moved to a new addition of the high school in 1982, while the grades K-6 were kept in the 1896 building. The high school athletic field was restored in the 1990s and was dedicated in honor of L. Richard Whitney for his service to the school. An all-purpose track and field with sidewalk, a concession stand, fencing, a new press box and turnstile entrances were built. It is still in use today. The effort of the school and community earned a Governor's Hometown Award in 2000.

By the 1990s the grade school was in need of a new building. Funding was received from the Life Health Safety Bonds. The building was to meet state regulations, and was to be attached to the high school and junior high. It was ready by the 1993-1994 school year at a cost of \$1,127,000. The building included a computer lab and library, a multipurpose room (gymnasium and cafeteria), 19 classrooms, storage rooms, restrooms, a kitchen, a teachers' workroom and lunchroom, a nurses' room, and two offices. It is currently in use and houses 350 students. When the 1896 building was vacated, five local developers from the Next Century Development Corporation bought the building. It was changed into apartments, and the gymnasium was transformed into a Community Center. It was finished in 1994 and is still in use today.

Elmwood Public School was built because of a great desire to educate the young people of the community. That desire still exists today. I am new to the community and writing this article gave me a feeling for the ideas going on in people's heads when the school was first built, and the same ideas that are going on today. [From Elmwood 2004; Elmwood 2006; and Elmwood Gazette, Jan. 23, 1896.]

Illinois Wesleyan University

Jackie Owensby

Oregon High School, Oregon

Teacher: Sara Werckle

Illinois Welseyan University is located in Bloomington, Illinois. The state legislature approved its charter and thirty men founded the University in 1850. Twelve were ministers and eighteen were laymen. The first classes were held in the mornings at the Methodist Episcopal Church that was built in 1836. All students were male and they boarded with good families on reasonable terms. The second year of the school was held in the basement of the Methodist Episcopal Church. The first students that had attended the school had received a copy of the birth certificate. Thirty men from the community signed the document that stated: "[they] do and hereby have associated ourselves together as Trustees and a body corporate for the purpose of permanently establishing at or near said city of Bloomington. . . an Institution of learning of Collegiate grade in accordance with the provisions of an act of the General Assembly of the State of Illinois. . . And we do hereby make known and declare that the said Institution of learning hereby established shall be known in law and equity or otherwise by the name and style of Illinois Wesleyan University." James F. Jaquess named the school Illinois University. Later "Wesleyan" was added due to the forthcoming Methodist Episcopal patronage.

They then developed a school. But where would it be located and how would it be paid for? They had several proposals on where to locate the university. Franklin Kelsey Phoenix offered to sell eight and a half to ten acres to the north of Bloomington for \$2,000 with a donation of \$1,000. Three people had agreed to pay \$500 each if they had chosen Phoenix's site. The site lacked the features that the Board of Trustees

wanted. Phoenix's site was turned down and the trustees looked at the area in which the university is presently located. The trustees had begun to build the Old North building, but soon they had to figure out how they were going to fund the construction and keep the university going. In 1851 they had seen a picture by an artist named Hunt. It was a "magnificent painting on which Hunt has spent a vast amount of labor," according to a newspaper account. They had raised a total of \$28 that went to the university. Hunt was the youngest founder and was an agent for the university. He traveled through central Illinois looking for financial support. In the spring of 1852 the Western Whig reported that he had \$15,000 before he had gone to the East Coast. When the year ended he had a grand total of almost \$17,000. Most of these funds went to building the school.

Several people have walked through the halls and classrooms of that school. Some were little known and others were known to the whole country. Some of the really important people to the school were the Munsell Brothers. The university would not be there without them. When the brothers came to the university it was \$9,853 in debt and the building was half finished. Oliver Munsell was elected president of the university in 1857. He had made an agreement with the Board of Trustees for a three year contract that would allow him to run the university at his expense. The university gave the financial problems to Munsell to handle. Oliver's brother Charles W. C. had also come to join the ministry in 1846. He became a trustee and a financial agent in 1856. He had plans to pay off the \$75,000 debt, to build new buildings, and to create an endowment for the university. When Oliver's contract was up, he gave the financial management back to the Board of Trustees and they agreed to carefully watch expenses.

Another person of great importance was John Wesley Powell. He was an explorer and a geologist. He became part of the administration in 1865. He was the first professor in the United States to use field work in teaching science. He took a group of students to the Colorado Mountains for some more in-depth studies. He was also the first to do an extensive study of this kind.

Adlai Ewing Stevenson was also one of the earliest students at the university. He came to the university at seventeen, was there for a year or two, and went to Centre College in Kentucky. He later became Vice President of the United States.

Illinois Wesleyan University has flourished over the years. It has been made of many different schools and classes. The School of Art was organized in 1946, the School of Drama, renamed School of Theatre Arts, was established in 1947, the School of Fine Arts was established in 1948 and the School of Nursing was founded in 1959. These examples illustrate the school's offerings. Conditions were difficult at first, but in the end the school rose above the problems that it faced. Many students have walked out of the school and pursued their dreams. People like William G. Mitchell, Phillip White, Edward B. Rust, Akito Mizuno, and others have been business leaders. People like Roger Roloff, Zelotes Edmund Toliver, Susan Quittmeyer-Morris, Dawn Upshaw, and more became opera singers. Due to the University's interests these students and more became what they wanted to be. [From Edward B. Fiske, "Illinois Wesleyan University," The Fiske Guide to Colleges; Illinois Wesleyan University, www.iwu.edu (Oct. 3, 2005); Minor Myers, Jr., and Carl Teichman, Illinois Wesleyan University; student historian's interview with Carl Teichman (Illinois Wesleyan historian), Oct. 3 and 7, 2005.]

John Mason Peck, Zealot of Education

Bryce Parsons-Twesten

Belleville Township High School West, Belleville

Teacher: Melissa Schmitt

Education is arguably one of the most important endeavors anyone can undertake.

Humans are distinguished from other animals by the capability for higher learning and to

utilize this ability is to assert humanity. As evidenced by the present argument in Dover,

Pennsylvania over the reaching of Intelligent Design in public schools, separation of

church and state in the area of education is a carefully watched barrier. However, not

long ago, the majority of places for higher education were associated directly with

religion. It was during this time that John Mason Peck lived and affected the education

system of Illinois.

John Mason Peck was born near Litchfield, Connecticut, on October 31, 1789.

He received little formal education while growing up on a farm. In 1809, he married

Sarah Paine from New York and two years later the couple moved to Big Hollow, New

York and converted to Baptism.

It was that year that Peck declared that God had called him to preach. The

minister at the church which he attended was only available one Sunday a month, and the

church readily accepted Peck as a preacher. He devoted the next six years to preaching,

teaching, and organizing churches and Sunday schools in the region.

Luther Rice, a passionate Baptist missionary, came to New York in 1815 and

encouraged Peck to work with developing missions. In 1816, enticed by this work, Peck

decided to offer himself as a missionary. A year later, Peck was appointed to become a

missionary for the Missouri Territory which made him the first Baptist missionary in that

region. Under him, the first missionary society in the West was formed. Once in St. Louis with his family, Peck again proved himself instrumental in establishing churches and Sunday schools, teaching all the while. He made sure that qualified teachers were hired in these schools. However, he found few eligible. This led him to the realization that a school to train teachers was necessary. This idea would stay with Peck for years to come.

Throughout his life, Peck showed a love for education, both for himself and others. In 1816, when waiting to be given a missionary assignment, he had traveled to Philadelphia to study under William Staughton, a widely renowned preacher and educator, where he remained for one year. In 1826 Peck spent a year at college in Philadelphia again, where he studied Greek, Latin, the sciences and medicine.

In 1820, Peck was instructed to go to Indiana to conduct missionary work.

However, Peck ignored the order because he believed his true calling was to work in the St. Louis region and he stayed for two additional years before moving to a farm in Rock Spring, Illinois, three miles west of Lebanon, St. Clair County, Illinois.

According to the Southern Baptist Historical Library and Archive on *John Mason Peck*, "Peck had theological education in mind as early as 1817, but after 1825 it became an obsession." Therefore, he traveled back East to raise funds to construct a Baptist seminary. Peck managed to collect over \$500 in addition to his own contributions. With this money, in 1827, he constructed a two-story building with two one-story wings on his property, near his house. Enrollment began at 25, and then quickly rose to 100. Peck acted as professor of theology. Thus, Illinois' first school for higher education was established.

"'Rock-spring Theological Seminary and High-School' was the first institution in the State of a higher dignity than a common country-school," according to one biographer. This institution set the groundwork for further advancement of education in Illinois.

Peck's fervor for educating others is shown by his involvement with a newspaper. The press has been used since its creation to educate the public on facts and news as well as on opinions and subjective matter through editorials. In 1829, *The Pioneer*, a single-page newspaper was issued at Rock Spring, with Peck serving as editor. In the same year, Peck purchased the interests of the publisher and became the sole owner, while remaining editor. He made it into a church newspaper, probably the first in Illinois. Peck continued to write editorials as the editor until 1839, when the paper was merged with another paper. He also authored several books including <u>Guide for Emigrants</u>, which contained sketches of Illinois and adjacent parts, and the <u>Life of Daniel Boone</u>.

When Rock Spring Seminary was in danger of closing, Peck obtained a contribution of \$10,000 to ensure its continuation. Benjamin Shurtleff was the altruistic force behind this donation. The school was moved at this time and was reopened in Alton, Illinois. Here it was renamed Shurtleff College in recognition of its benefactor.

Jason Mason Peck, though not raised in an educated environment, developed a passion for it. He pursued the furthering of his own intellect and sought to instruct others for the majority of his life. On March 15, 1858, Peck died in Rock Springs, Illinois, after suffering a severe fever four years earlier. Six years prior to his death, Harvard conferred on him an honorary degree. His zeal for education has had a lasting effect on Illinois, as well as any place his services were rendered. Just as education is surely one of the

greatest ventures to undertake, John Mason Peck was surely a great man. [From *A Baptist Mission Brief: John Mason Peck.* 

http://www.baptistpage.org/Distinctives/missions/print/print\_peck.htm (Oct. 1, 2005); J.

Allen, Legends and Lore of Southern Illinois; H. Beckwith, Rev. John Mason Peck.

http://www.illinoishistory.com/peck-john-mason.html (Oct. 1, 2005); R. Howard,

Illinois; John Mason Peck. http://www.sbhla.org/bio\_peck.htm (Oct. 1, 2005); Martha

Raffaele, School board OKs challenges to evolution.

 $http://www.msnbc.msn.com/id/64702599 \ (Oct.\ 2,\ 2005);\ R.\ Sutton,\ \textit{The\ Heartland},\ and$ 

Virtual American Biographies: John Mason Peck.

http://famousamericans.net/johnmasonpeck/ (Oct. 1, 2005).]

Vashti McCollum: The "Atheist" Mom

Lauren Piester

University Laboratory High School, Urbana

Teacher: Adele Suslick

She had tomatoes and cabbages thrown at her, her family's kitten was stolen, and she was shunned by an entire community, yet she changed Illinois education forever. In 1945, Vashti McCollum filed a lawsuit to abolish religious instruction in public schools. Losing in two lower courts, she proceeded to take her case to the national level and won. McCollum's quest to honor religious freedom significantly changed Illinois education, leading the way for many more cases involving the separation of church and state and proving that she would go as far as needed to stand up for what she believed.

When McCollum's son Jim came home with a permission slip for participation in religious instruction at South Side, a public school in Champaign, Illinois, Vashti initially refused to sign it. She did months later when she saw how badly Jim wanted to take the class. Soon after signing the form, however, McCollum realized that the class did not teach students ethics, morals, tolerance, or good behavior as she had expected. Instead, she said, it promoted "complete religious indoctrination, abounding in faith and miracles." The next year, Jim transferred to Dr. Howard, another public school in Champaign. Again, he brought home a permission slip for religious instruction which she refused to sign. McCollum believed that these religious classes were violating the First and Fourteenth Amendments to the United States Constitution dealing with the separation of church and state. She also thought that it was inappropriate for churches to take advantage of public schools. As a result, the McCollum family was ostracized and bullied by the community. The school forced Jim to sit alone in the music room or in the

hallway while other students were in religious classes, and he was subsequently teased by his peers. He often came home crying because teachers seemed angry at him for not participating in religious instruction. They told him that his parents should sign the permission slip because he was keeping the class from being "100 percent," and they often tried to convince McCollum to allow Jim to take one of the classes, but with no luck.

Public reaction to the case varied. Some people were very much on Vashti's side. Support came from many places, including a Unitarian minister, Phil Schug, who helped McCollum throughout the entire process. One Jewish family, who had gone through the same thing as Vashti and her family, went to all of McCollum's hearings. The McCollums also received many calls and letters from people with support and wishes of good luck, but very few revealed their names.

Others vehemently opposed Vashti's position. One unnamed group planned to murder her. In addition, the McCollums received many threatening phone calls and letters containing unimaginably foul language. One man even went to the Illinois Board of Education to legalize religious classes in schools before McCollum could make them illegal. This bill, however, never passed. At Halloween, a group of people threw various fruits and vegetables at Vashti, piled trash and leaves two feet high against the front door of her house, and stole the family kitten.

Controversy surrounded the McCollum case. Many believed that she was an atheist trying to attack religion, but as she states in *One Woman's Fight*, "nothing could have been farther from the truth." Having been raised by a religious mother who

baptized and named her for a biblical feminist, McCollum was not opposed to religion. Her objective, she said, was to defend the constitutional right to religious freedom.

The case first went to trial in Champaign, and people of many different religions testified. Vashti, Jim, and Vashti's father, a self-proclaimed atheist, also testified. After many long weeks, the court found that the students who did not participate in the religious classes were treated fairly by being able to attend study hall while the classes were going on, and that the religious classes were extra-curricular activities, not academic classes. The court also decided that any ostracizing of Jim by his peers was not because of his failure to attend the religious classes, but because of behavioral problems having nothing to do with Jim's religious beliefs. The McCollums had lost. The case was then heard in the Illinois Supreme Court with similar results. Finally, the case went to the United States Supreme Court. In an 8 to 1 vote, the justices agreed with McCollum. They ruled that the classes had no real purpose in the school other than to aid religion. They found these classes in violation of the First and Fourteenth Amendments of the Constitution, and religious classes in public schools became illegal.

Vashti McCullom changed the Illinois school system forever and led the way for similar cases to be brought to the nation's attention. Since the McCollum case, many more suits regarding religion in public school have been filed. One was <a href="Engal v. Vitale">Engal v. Vitale</a> in 1962, which dealt with a New York school requiring daily mandatory prayer. Another was <a href="Herdahl v. Pontotoc [Mississippi] County School District">Herdahl v. Pontotoc [Mississippi] County School District</a> in 1995, filed fifty years after the McCollum, challenging intercom prayers and Bible instruction in public schools. [From Elizabeth A. Henke, "Engal vs Vitale." <a href="Encyclopedia of American History:">Encyclopedia of American History:</a> Postwar United States 1946 to 1968; Dannel McCollum, "Local Lawsuit Establishes

Freedom From Religion." <u>The Daily Illini</u>, Sept. 28, 1987; Vashti Cromwell McCollum, <u>One Woman's Fight; Melissa Merli</u>, "McCollum Case Still a Landmark, 50 Years Later." <u>News Gazette</u> Mar. 9, 1998.

http://63.86.132/ngsearch/index.cfm?&page=displystory.cfm&year... (Sept. 10, 2005);

Jerrold Nadler, "McCollum V. Board of Education: A Milestone for Religious

Freedom." http://thomas.loc.gov/cgi-bin/query/z?r105:E02AP8-527: (Oct. 3, 2005);

Supreme Court Case Briefs. www.texarkanacollege.edu/~vwilder/scbriefl.pdf. (Oct. 3, 2005). ]

**Teaching with Technology** 

Kirsten Ratermann

All-Saints Academy, Breese

Teacher: Stephanie Garcia

Born in 1976 of Cuban parents, who immigrated to Illinois, Roxana Hadad, graduated from Hinsdale South High School near Chicago, Illinois. The following year, she attended the University of Illinois, majoring in English Literature and Spanish. Not yet thirty years of age, Roxana Hadad has already contributed immensely to the state of Illinois and its educational system. Each day, she continues to put her efforts towards

helping today's youth through technology, communications, and personal dedication.

While working towards her degree from 1997 to 1999, Hadad developed the University of Illinois's first online student Spanish course. During this time, she realized she wanted to make a difference by combining her knowledge of education with modern technology. By September 2000, Roxana had applied to New York University's Interactive Telecommunications Program, in the Tisch School of Arts. While participating in this program, she also worked as an intern at the Collaboratory located at Northwestern Illinois University. Here, she applied her knowledge with enthusiasm to create a program for children, helping them learn and interpret foreign languages.

As the instructional designer for *LexiTown*, she managed, designed, and programmed this curriculum for the Illinois Board of Education. LexiTown is an online foreign language website that is accessible to any student. Through animated computer images, students participate in various activities which help them learn to listen, speak, read, and write in a second language. Several projects are made available to help children understand the cultures and languages of targeted countries. With the majority

of the focus directed towards students and classrooms in Illinois, nationally as well as internationally, *LexiTown* has been utilized, greatly.

Recently, Hadad traveled to Durango, Mexico with the Youth Technology Corps' students, from five schools in the Chicago area. She introduced them to *LexiTown* and the Northwestern Collaboratory Project so that they would be able to converse through web technology, and explore language art.

In her free time, Roxana works as a freelance illustrator and animator. She also enjoys volunteering at the Children's Memorial Hospital, and with the Youth Technology Corps. Because of her hard work and dedication, she was recognized as a Macromedia Education Leader and also received a New York University Graduate and Professional Opportunity Fellow award. As a result of her fluency in Spanish and bicultural background, the National Hispanic Foundation for the Arts Fellow honored Roxana for her achievements.

Roxana's mother has had an enormous impact on Roxana's love of education.

Her mother helped her realize the importance of educating and guiding children to pursue their dreams. For nearly thirty years, she taught kindergarten as a bilingual teacher in the Chicago Public School district. Mrs. Hadad still shows great interest in her students and truly enjoys her job. Roxana also realizes that she has been blessed with having many wonderful teachers throughout her life, who have contributed to her love of learning.

Now, she is sharing this love with other children.

Roxana has become very involved with her students and committed to her career. She constantly expands her knowledge in the field of education and technology, while encouraging today's youth to put forward a full effort in all of their endeavors. She has

had a major impact on the educational system in Illinois and on the lives of many children throughout the country. Roxana is truly an inspiration as well as a mentor and role model. [From student historian's email correspondence with Roxana Hadad, Sept. 7 and 13, 2005; "The Roxana Hadad Website, Resume," http://directory.northwestern.edu/?query=roaxana+hadad (Sept. 1, 2005; "The

nttp://directory.northwestern.edu//query=roaxana/nadad (Sept. 1, 2003, The

Collaboratory Project, Homepage," www.roxanahadad.com/hadad\_resume.pdf (Sept. 21,

2005); and "Macromedia Education Leaders Program,"

www.macromedia.com/resources/education/k12/special/leaders/profiles/rhadad.html (Aug. 30, 2005).]

Schools Make a Difference

**Brooke Restoff** 

All Saints Academy, Breese

Teacher: Stephanie Garcia

On May 10, 1823, the Bacon family had a wonderful experience when their son Samuel

was born near Cortland, Ohio. When Samuel was a young boy, he often laughed or

smiled. However, during his childhood years Samuel became very sick with scarlet

fever. As a result, he lost his sight completely. After being diagnosed, his family did not

know what life would have in store for him. Little did he or his parents know that some

day he would become an instrument for the blind in Jacksonville, Illinois.

In 1838, Samuel's parents decided to place him in the institution for the blind in

Franklin, Ohio. Because of his brilliance, he was continually left with nothing to do.

Teachers were told not to give Samuel any help, since they thought that his brilliance

might be discouraging the other students. Being bored, Samuel Bacon started his own

business, manufacturing and selling cleaning brushes. However, in 1841, all this changed

when he was introduced to the study of algebra, geometry, and physics, something he had

not known before.

In 1844, at the age of 21, he headed to Gambier, Ohio, to attend Kenyon College.

After attending Kenyon for over a year, he returned to Franklin, Ohio to teach at his old

school. However, after teaching for two years, he decided he wanted to live closer to his

family. In 1847, he traveled to Cincinnati where he took a steamboat to Galena, Illinois.

On his trip, he struck up a conversation with a stranger. They began talking about the

Illinois Constitutional Convention being held in Springfield, Illinois. Immediately,

Samuel Bacon took great interest when he heard the meeting might involve establishing a new institution for the blind.

Bacon decided to travel to Jacksonville instead of Galena since his plan was to establish a blind institution there. While in Jacksonville, he stayed at the Morgan House, an old building that once housed the insane. During his first days in the town, he found out what an exciting community Jacksonville was. Samuel learned it was the center of a fertile agriculture area and was also the first town to have a railroad in the state of Illinois. Since the people of Jacksonville took great pride in the institutions already built for the insane, deaf, and dumb, they thought it right to build one for the blind. While in Jacksonville, Samuel met Dr. English who invited him to a meeting being held on December 10, 1847 to discuss the institution. At this time, no one could possibly know that this meeting would lead to a school that would teach only blind students.

During the meeting, Samuel pointed out that there were only three institutions for the blind in the United States, and most of them were located in the Northeast territory. As the meeting progressed, they reviewed how some of the other blind institutions had been established. It was discovered that many of the other blind institutions were established by private funds. Once the legislatures saw that the blind would be able to lead productive lives, they were more willing to provide money needed. As Samuel Bacon kept his interest in the blind institution, many people encouraged him to make a final decision, and establish the school for the blind.

Later, Samuel Bacon visited some of the surrounding towns to find parents interested in sending their children to his school. He found four parents who would be

willing to give their children a challenge and send them to school. Since the three other blind institutions had been a success the legislature decided to give this one a chance.

On June 5, 1848 the blind institution in Jacksonville, Illinois was opened in an old building. The school started with only four students, George Springer, John Jones, and George and Nancy Fielding. In the next two months, many students worked hard learning songs, reading parts of the Bible, and doing mental math problems. Once they learned this, they were to present it in front of the legislature insuring that the institution would continue to remain open.

On January 3 and 4, 1849, Samuel Bacon took his four students to Springfield, Illinois, to demonstrate the progress they had made. Many other blind students and disabled children also made their presentations. Different children with different disabilities showed what they had learned over the past years and months. The legislature was very impressed with the abilities of these students.

With the approval of the legislatures and the assurance of three thousands dollars, the people of Jacksonville began rehabilitating the existing blind institution. Although it was to be finished on April 1, 1849, many delays occurred, and it did not reopened nine months later.

After reopening, there were no problems with attendance. After seeing the success of students, and what productive lives they were leading, parents began flooding the school. Within four more months, students were being turned away.

Today, you can travel to Jacksonville, Illinois and see the institution still educating blind students. Every year the enrolment increases. This blind institution in Jacksonville, Illinois is only one of the many ways we can help disabled young people. [From Don

Harrison Doyle, <u>The Social Order of a Frontier Community</u>; "Samuel Bacon (Jacksonville, Illinois), Timeline,"

 $http://www.morgan.k12.il.us/isvi/historic\%20line\%\%time\%20of\%201SVI, html.\ ]$ 

**Jubilee State College** 

Jenna E. Schaefer

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

Only a short westerly drive from Peoria resides a small college campus few people are aware of. One only has to visit the campus to see the beauty and feel the surrounding history of Jubilee State College. In addition to influencing other school's construction, Jubilee State College was the first boarding school in Illinois. Also, the school was one of the first rurally located schools. At its peak, there were more than 50 students attending various divisions of the school. Though the college is no longer open for classes, there is plenty for people to learn. As a result of Philander Chase's perseverance, Jubilee State College had an educational impact not only on the surrounding community, but the entire state of Illinois.

With the donated funds for Jubilee Sate College, the school was only able to stay open for a little over two decades; however, in this short amount of time the school was able to influence Illinois. Immediately after funds for the project of Jubilee College began to be gathered in 1838, Philander Chase began work on the layout of the school. Chase's plans were to create an economically self-sufficient educational community that would train young men and women. He believed that an isolated location would help promote the school's financial independence and allow him to better shape and control the students in a serene environment. Because these plans were carried out, Chase was able to open the first school of higher education in the Peoria area. Compared to other colleges at the time, Jubilee College was the only one placed in a rural environment. If students paid one hundred dollars in advance, they cover the costs for a single year term, making Jubilee one of the first schools in Illinois to set a high standard so future schools could have cheaper expenses. Even though this seemed like a good bargain, few students ever enrolled in the school.

Classes were held for the first time in 1840. Students enrolled in a theological department, boy's preparatory school, college for men, and a girl's school. Rather than the seminary school being most successful, which was Bishop Philander Chase's favored department, more students enrolled in the other aspects of the school. Even though his full intentions were never realized in practice, the school's college courses were highly effective. In 1847, five students entered the sacrament of Holy Orders, and nearly 800 people came to the school grounds. In the same year, five students were admitted to the college and granted Bachelor's degrees in the arts and science. This allowed community members a chance to see the school's potential, and a chance to see a local place where they could enroll. In fact, four theology students, forty preparatory students, and twelve young men in college courses attended the school in 1855. By this time, the girl's department had already shut down. Tremendous numbers of students began to enroll, and several other educational leaders at this time were inspired to create highly promising schools of higher education. Even so, the school gradually began to lose enrollment. In fact, because of low numbers of students and the Bishop's death, the school could not support itself, and it was completely shut.

After closing Bishop Philander Chase's school, several other organizations tried to use the school, but all failed as well. The surrounding environment was never as appealing to the people of that era, who were looking for a bustling cityscape instead of a tranquil release like Jubilee's college grounds.

Several very prominent students graduated from the Jubilee College. One was E. H. N. Patterson. He had imagined publishing a literary journal with Edgar Allen Poe as the editor and exchanged a number of letters with him. Before their business arrangements were finalized, however, Poe died. Patterson, nonetheless, went on to publish the <u>Oquawka Spectator</u>, a regional newspaper.

Throughout the years, Samuel Chase and the Bishop worked together with the school because of their admiration for one another and the thought of educating the

people of central Illinois. With the precedent of these two educational leaders, other people were persuaded to follow in their path, and open more successful schools. Had it not been for the pair, the school would not have touched the hearts of the central Illinois area, and encouraged others to create schools of their own.

From the store, print shop, L-shaped two-story frame boarding house, and several faculty homes that spread across nearly 4,000 acres in 1850, only the L-shaped building remains. In an effort for easier travel, more roads and paths have been constructed around the school. This allows more recent forms of transportation to serve throughout the area as a calm retreat from the city. If not for Chase's dedication, the park's numerous bike and hiking trails, picnic areas, and campsites would likely not be available. As well as hosting a Christmas Celebration in the chapel, the annual Olde English Faire is held at the college grounds.

Because of Philander Chase's drive to succeed, Jubilee State College influenced the state of Illinois. It was important in the creation of higher education facilities in Illinois. Philander Chase's legacy can still be seen today in the buildings and grounds of Jubilee State College, as well as through the influence of the people who had attended the school. [From Bill Adams, Yester Days; Philander Chase, Bishop Chase's Reminiscences; ."Jubilee College State Park"

http://www.historicpeoria.com/select.cfm?chose=96 (Sept. 7, 2005); Kenyon College, <u>A</u> Brief Biography of Philander Chase

http://www2.kenyon.edu/Khistory/chase/biography/biography.htm/. (Sept. 6, 2005); Student historian's interview with Joan Welton (former employee at Jubilee College historic site and current tour guide), Sept. 5, 2005.]

The Foster College of Business Administration: Redefining Education in Illinois

Zachary P. Tilly

Washington Gifted School, Peoria

Teachers: Danielle Dies and Mindy Juriga

"Business is the foundation of society." Robert Baer, the Dean of Bradley University's

Foster College of Business Administration, uttered these words. It is true that today's

world would crumble without business. It is for that reason, among others, that it is

necessary for the next generation of CEO's and businesspersons to be educated at a

collegiate level. Because of the state of the art educations available, the next generation

will have the best education of any to date and conditions will keep improving. Since

1920, the quality of business education in central Illinois has changed dramatically, due

to the establishment of Bradley University's Business Administration School, now

known as the Foster College of Business Administration.

During the 1870s and the 1880s, the business world was turned upside down by

the Industrial Revolution. The country rapidly evolved into an industrial nation. Central

Illinois felt the effects of this revolution; many companies developed during this time that

changed the face of the state and country. Small companies, often led by uneducated

leaders, had to fight to survive. The Industrial Revolution also influenced the way

businesses ran. By the 1890s the business world had become pressure filled and stressful.

Many situations including mergers and acquisitions added to the pressure. As a result,

the need formed for educated leaders who knew how to deal with this pressure. During

this time laborers united and formed labor unions. These changes, along with other

factors, laid the foundation for the establishment of business schools.

Many factors made the need for business schools more obvious. Before the late 1890s the need for the establishment of business schools was not evident. However, when companies expanded, the heads of the companies realized that running large corporations was a difficult task; hence, the need for managers and leaders with a collegiate education was finally seen. After many fruitless attempts beginning in 1881, these needs were addressed when Wharton School of Finance, was formed in 1897. The trend caught on and forty-six percent of all universities had business schools by the end of World War II. The University of Chicago business school was one of and, before 1920, the nearest to Peoria. There was no business education in central Illinois until 1920, when Bradley's Department of Business opened.

When the Department of Business at Bradley opened, it was a small two-year program with only one full-time instructor, a man by the name of Loyal G. Tillotson. Three years later it became a four-year program. That same year the school was renamed the Department of Business Administration and Economics, and Loyal G. Tillotson was named the first dean. After World War II, the enrollment increased exponentially. As a result, the school was reorganized into four parts: Economics, Accounting, Marketing and Retailing, and General Business. Reorganization took place again in 1950. This time it was the entire university which experienced a massive overhaul. The university was divided into many separate colleges, including the College of Commerce. Also during this time, the Department of Business was renamed the College of Business

Administration. In 1994, the school took the name Foster after Tom and Ellen Foster, FCBA alums who gave a sizable donation to the school.

Bradley's College of Business Administration has had a profound impact on central Illinois throughout the last century. It was the first business school in central Illinois, and, in addition, one of the first in the state. Before opening, anyone who was interested in a business education would have had to travel nearly 160 miles north to attend the University of Chicago. This was a considerable inconvenience that could have stopped thousands from receiving a good education. However, Bradley has educated many people very well through the years. Some have supplied the area with many new entrepreneurs, some of whom went on to have a big influence on the local economy. In fact, it has been estimated that about one-third of all graduates from the CBA are from Peoria County and the nine surrounding counties. In total, approximately 11,000 people have graduated from the school. This means that Bradley's CBA has given almost 3,700 central Illinoisans opportunities previously unavailable. These people, in addition to the remaining two-thirds from across the globe, have gone on to be prominent figures in businesses, government, and non-for-profit organizations.

Bradley University offers many courses to its students. By 1949 the school already offered 73 under graduate courses. Most of these courses were very basic in nature, pertaining to real estate, accounting, and commerce. A year earlier, the university began Masters of Business Administration (MBA) and a Masters of Arts in Economics (MAE). The Masters of Arts was halted in 1963, but the MBA is still offered today. This course brought the first degree in business to central Illinois. In 1978 the Association to Advance Collegiate Schools of Business (AACBS) accredited the university. Since this time, the AACBS has reaffirmed the university's accreditation three times. The award has provided prospective students with ample reason to attend the school, as it is a very

prestigious award. Another draw for students is the high placement rate. The placement rate is the percentage of graduates that go on to be placed in careers. An average of ninety-six percent of the graduates from the school are placed in good jobs. These statistics and awards have increased the prestige and popularity of the FCBA through the years.

The quality of business education in Central Illinois has changed dramatically since 1920, due to the Foster College of Business Administration, formerly the Business Administration School, at Bradley University. The school has provided its graduates with the educations needed to succeed in today's world. These graduates have gone on to change the world for the better in many ways. They've built companies, formed charities, and become successful businesspeople. From day one, Bradley University has helped pour the foundation for today's world. [From Bradley University, "About the Foster College of Business," http://www.bradley.edu/fcba/about/about.shtml (Sept. 2, 2005); William A. Clarey, Building Bradley Business; Clare Howard, "Bradley to Offer New Executive MBA," The Journal Star, Mar 21, 2001; Student historian's interview with Robert Baer (Dean of the Business School, Bradley University), Sept. 8, 2005; Paul Uselding, "Management and Education in America: A Centenary Appraisal" http://www.hnet.org/~business/bhcweb/publications/BEHprint/v010/p001 5-p0030.pdf.(Sept. 8, 2005.]

The University of Illinois and Engineering

Anne Tracy

Washington Gifted School, Peoria

Teachers: Janelle Dies and Mindy Juriga

John Milton Gregory, the first President of the University of Illinois, once said, "Let us

educate for life, as well as for art, leaving genius free to follow its natural attractions and

lending in talent a culture fitting for all emergencies of public or private duty". When

the University of Illinois opened, it made history by being the first big university in

downstate Illinois. It is now a focal point of Illinois education, all the while keeping

Gregory's ideal to educate not only for business, but for life. This philosophy has led to

excellence, specifically excellence at the College of Engineering at the University of

Illinois. This has made Illinois a power house in engineering and changed Illinois'

history for the better. Significant technological advances have been made, with local and

national affects.

In 1867, the Illinois Industrial College was founded. Its name was changed to the

University of Illinois in 1885. Lawmakers wanted downstate Illinois to become more

industry and business-oriented; hence, they chose a campus in Champaign. Initially, the

Industrial College was only in session during the winter months so farmers could attend.

Scholarships were given from the very beginning. The original plans were to teach only

agriculture, science, languages, and instruct in mechanical arts. After taking the required

courses, students were awarded degrees.

The College of Engineering was opened in 1867, at the same time the University

opened. The College of Engineering was originally named the Polytechnic Department.

At the Polytechnic Department, students were required to take algebra, geometry,

trigonometry, calculus and languages. In 1880, The University had 434 full time students and seventeen full time teachers. These numbers were impressive in the nineteenth century, creating a name for education in downstate Illinois. Today, the University of Illinois educates almost 40,000 students a year and has 10,000 faculty members.

Respectably, \$2,500,000 from external funding has been used for research.

The College of Engineering at the University of Illinois has been repeatedly declared one of America's top schools. It is fourth out of 300 in its graduate and undergraduate programs. It consistently gets ranked in the top four because of the combination of its resources, breadth, quality, and collegiality of the staff and students. The faculty of the College of Engineering is highly accomplished and recognized. There are two Nobel Laureates, a National Medal of Technology recipient, and many others currently among the staff. Some outstanding professors include Professor Floyd Dunn, Professor Paul Mayes, Professor Yuen Tze Lo, and Professor Donald Blitzer. The most influential professor was probably Professor John Bardeen, a two-time Nobel Laureate and an inventor of the transistor.

The College of Engineering prepares students for jobs in engineering and related fields in industry, commerce, education, and government by teaching skills like communication, teamwork, and individual professionalism. To support students in their journey through the College of Engineering, many high tech educational centers have been built. In 2004, the most successful and extensive center for learning, the Thomas M. Siebel Center (Department) opened. The Micro and Nanotechnology Laboratory advances education and research in microelectronics, photonics, biotechnology, and

nanotechnology. TMSC is always taking on a new project of research or learning in the engineering world.

The University of Illinois has many supporters and funding for its research and projects. The Caterpillar Company, in Peoria, is a Corporate Partner of the College of Engineering. The Grainger Engineering Library Information Center, the National Supercomputation Applications and the Beckman Institute for Advanced Science and Technology make significant financial contributions.

The College of Engineering recently added some pro-market policies. A disagreement occurred between the University of Illinois and Netscape over code writing. Netscape offered financial reimbursement, but the school did not have appropriate policies in place and was unable to accept it. With new policies in place, Netscape has made payments totaling in \$270,000,000. The University of Illinois now also receives money from licensing use of *Mosiac*, the first graphical World Wide Web browser, created at the University. The policies have helped other up and coming inventors at the College of Engineering. Ping Fu is the creator of Alpha Shapes, a program that lets users make 3-D prototypes of cars, funded by General Motors and Boeing. Robin Bargar is the co-creator of a software program that works with sound quality, appealing to multimedia and computer gaming markets. Montage is another program that makes a collaborative world environment. Both have commercial marketing possibilities. Not everyone is happy, though. Tim Krauskopf, a programmer at the university, thinks it is a bad idea because the large payoff from big companies could distract from the University of Illinois' pursuit of excellence academically. However, having the policies is a good idea because it allows even more productive research to be done that would otherwise lack

funding. Without them, the university might not have had such an important influence on Illinois history.

One particular milestone was the building of the Ordinance Variable Automated Computer and the Illinois Automated Computer. Funding for the construction of the computers came from the United States Army and the University of Illinois. The Digital Computer Laboratory was formed specifically for the construction in 1949. ORDVAC was completed in 1951 and ILLIAC was completed in 1952. ILLIAC II, a more advanced computer, was built in 1962. Used by Professor Donald B. Giles in 1963, he discovered three Mersenne Prime numbers, one being 3,000 plus digits and the biggest known prime number at that time. The ILLIAC II was a transistorized computer, and they continue up to ILLIAC IV.

Because of the College of Engineering at the University of Illinois, significant technological advances have made Illinois a powerhouse in engineering and innovation, helping Urbana-Champaign become one of the most innovative "tech cities" and attracting seventy high tech companies. Engineering brings in money, innovations, and business to the state, influencing yesterday and today's economy throughout Illinois. The history of Illinois would be greatly different without the help of education and engineering at the University of Illinois. [From "Department of Computer Science," University of Illinois http://www.cs.uiuc.edu.php (Sept. 3, 2005); .

"Engineering at Illinois" http://www.engr.uiuc.edu (Sept. 6, 2005); Kevin

57

Horan, "Diplomas and Dollars." <u>U.S. News & World Report</u>, Feb. 5, 1995; Henry C.

Johnson and Erwin V. Johanningmeir, <u>Teachers for the Prairie</u>; Harry A. Kersey, <u>John Milton Gregory and the University of Illinois</u>; "Electrical and Computer Engineering" <u>Computer Engineering (1999).</u>] From the Flames, the Phoenix: The Physics Department at the University of

Chicago

Andrew Weatherhead

University Laboratory High School, Urbana

Teacher: Adele Suslick

The University of Chicago adopted its coat of arms in 1910. Part of its design depicts a

phoenix emerging from flames. In myth, the phoenix is a legendary bird that is reborn

after bursting into fire. Like the flames of the university's coat of arms, scientists at the

university have sparked important research in the field of physics.

The American Baptist Education Society established the university in 1890 to

promote and develop science. The founders wanted to educate people of all kinds, and as

a result, they allowed women and members of any religion to enroll. Oil magnate John

D. Rockefeller provided funding for the university's early development and attracted

some of the brightest scholars by offering them a competitive salary.

Physics at the University of Chicago became crucial to national defense after

World War I. Many of the university's Nobel laureates in physics worked at the

Metallurgical Lab, a "cover" name for the facility at the university's campus whose goal

was to produce the first nuclear reaction. Julian Schwigger, Hans Albrecht Bethe,

Eugene P. Wigner, Maria Goeppert Mayer, and Enrico Fermi all conducted research

there. They concentrated on the atom at the nuclear level.

During World War II, the United States government thought Germany had

developed a powerful new weapon. In 1939, Albert Einstein informed President Franklin

D. Roosevelt that nuclear fission could be used to create a powerful bomb, and the

Manhattan Project resulted. After the attack on Pearl Harbor in 1941, teams of scientists across the United States contributed to this project.

In 1942, a group of scientists at the University of Chicago led by Enrico Fermi started work on the first self-sustaining nuclear chain reaction. A labor strike prevented them from building their laboratory in the Argonne forest preserve near Chicago.

Instead, they worked on a racquet court under the football stands at Stagg Field on the University of Chicago campus. The world's first nuclear reactor, called Chicago Pile-1, consisted of a heap of uranium and graphite blocks. On December 2, 1942, at 3:20 p.m. the pile "went critical," a nuclear reaction occurred, and the atomic age began.

Research in nuclear physics for peaceful purposes continues at Argonne

Laboratory and at the Fermi National Accelerator Laboratory, both of which the

University of Chicago manages. Today, the physics department at the University of

Chicago is one of the world's best. Physicists study applied physics, theoretical physics,
and experimental physics, and they conduct research in particle theory, string theory,
field theory, general relativity, and theoretical astrophysics and cosmology. A major
research area in experimental physics continues to be nuclear physics, and a sculpture
resembling a "mushroom-cloud" sits on the site where the first nuclear reaction took
place. Forty-one faculty members at the University have been members of the National
Academy of Sciences; eight have received the National Medal of Science, and twentyfive faculty members, teachers, and students have won the Nobel Prize in Physics.

Academic institutes and research centers affiliated with the university's physics
department include Apache Point Observatory, Yerkes Observatory, the Computation
Institute, the Institute for Biophysical Dynamics, and the Institute for Body and Mind.

Along with the phoenix, a motto appears on the University of Chicago's coat of arms: Crescat Sientia, Vita Exolatur, "Let knowledge be increased so that life may be enriched." The university has achieved this goal in science. The physics department at the University of Chicago is truly one of the best in the world. [From Argonne National Laboratory, "Science and Technology: Argonne Accomplishments and Discoveries." www.anl.gov/Science and Technology/Accomplishments/index.html (October 10, 2005); "Chicago Pile-1." http://en.wikipedia.org/wiki/Chicago Pile 1 (Sept. 29, 2005); Fermilab, "Fermilab's Contributions to Science & Society." www.final.gov/pub/inquiring/physics/discovering/index.html (Oct. 10, 2005); "Manhattan Project." http://en.wikipedia.org/wiki/Manhattan Project (Sept. 29, 2005); Manhattan Project Signature Facilities. http://ma.mbe.doe.gov/me70/history/met lab.htm (Sept. 29, 2005); "Metallurgical Laboratory." http://en.wikipedia.org/wiki/UniversityofChicagoMetallurgicalLaboratory (Sept. 29, 2005); Encyclopedia of Chicago, "University of Chicago.". www.encyclopedia.chicagohistory.org/pages/1289.html (Aug. 31, 2005); Doctoral Program in Physics, University of Chicago Department of Physics http://physics.uchicago.edu/program/html (Oct. 5, 2005); University of Chicago Fact Sheet www-news.uchicago.edu/resources/facts/ (Aug. 31, 2005); University of Chicago History www.uchicagox.com/index.php?act=userdef&p code=47789 (Aug. 31, 2005); University of Chicago Physics Nobel Laureates. www-news.uchicago.edu/resources/ nobel/physics.html (Sept. 29, 2005).]

Yesterday, The Illinois Industrial University, Today, The University of Illinois

Lindsay Wiegmann

All Saints Academy, Breese

Teacher: Stephanie Garcia

In 1868, the doors of the Illinois Industrial University opened, with the promise of learning in the air. The Illinois Industrial University, now known as the University of Illinois, was opened as a result of the Morrill Land Grant Act. This act allowed the states to establish new types of schools of a higher learning. Urbana and Champaign put together a bid wanting the University's home to be located in between their towns. Their bid consisted of \$2,000 through \$100,000 for the building and grounds, county bonds, free freight on Illinois Central Railroad, landscaping, and 970 acres of farmland. The total bid was valued around \$285,000. Both Urbana and Champaign, wanting more assurance, wined and dined the legislators, hoping to win their approval. Even though their bid was not the preeminent of the four competing counties, when the votes were counted, Urbana

and Champaign came out on top. Once the location was decided, the University and its

faculty could now focus on other important issues.

The University wanted to emphasize industrial education without excluding other scientific and classical studies. However, without the help of the university's first president, John Milton Gregory, the university might have developed into more of a technical school, and may not have been recognized as the University of Illinois we know today. Gregory fought for literature and language courses, even though some thought they were not useful in agriculture and industry. But Gregory continued his push, stayed involved in the school, and always wanted to remain a part of the university. His last wish was to be buried on campus and he lies there today.

The university sits between the two cities, Champaign and Urbana, Illinois.

Originally, only one and a half miles of muddy fields separated the two towns. It is on these fields that the University of Illinois found a home between the Illinois Central station in Champaign and the Urbana courthouse. By 1868, the two towns reached a combined population of 5,000 people. The university was charted in 1867, and opened its doors one year later. At first, the university consisted of only one building, a vacant building that once housed a girls' academy. It included classrooms, a lecture hall, a laboratory, a museum, a library, and on the top floor, dormitories for the students. Since space was limited, Gregory's office, also served as the school's library. By March 2, 1868, the university's faculty consisted of only two professors, who taught Astronomy, Butler's Analogy, Elocution, Evidences of Christianity, History of Inductive Sciences, Mental Philosophy, and Penmanship to a class of fifty students. It is amazing that only two professors taught seven classes a day, starting at 7:00 in the morning and not finishing until 5:00 in the evening.

Students needed to meet only two requirements to be accepted to the university. First, they had to be at least fifteen years of age, and take a sixty-five-question test, and score seventy percent or better. The students were given certificates upon their arrival at the university. Since the board wanted an Eastern tradition to remain, certificates replaced the student's degrees or diplomas. Those who were accepted spent at least two hours a day performing manual labor around campus. The students or cadets could be called to serve in the Illinois National Guard in case of an emergency. In addition, each week the cadets were required to drill three hours under the watchful eye of a Civil War officer. In full uniform, the cadets marched daily to and from the chapel. College colors were not

even established until the university received its present name, the University of Illinois, in 1885. Believe it or not, the university's first colors were not the famous orange and blue that we see today, but cardinal red and silver.

When the university was first opened athletics were not offered to the students. As a result, the students began forming their own teams. Because baseball and track were the most favored sports, and were very popular among the students, they designed their own teams for these two sports. Then, during the 1870s, a new game, football, was organized and became more popular. The first unofficial game of football was played at the University in 1876.

Two years later, Samuel C. Stanton, a student, brought a football from England and began teaching other students the basics of the game. Football was soon recognized as a "brutal sport", leading faculty members to ban the game. Just a few years later, an edition of the 1880 student newspaper posed the question, "Can not foot-ball be revived among us? There is a woeful need of some such game to call forth the energy and enthusiasm of all the students." According to historian Winton Solberg, the students continued to play "an occasional game of drive, kick-about, or a class rush, or a rough-and-tough game that bore a slight resemblance to the Canadian game [rugby]," throughout the 1880s.

In 1889, Scott Williams, a fan of the game, organized a football team at the university. With the permission of the Athletic Association his team represented the university at the Intercollegiate Oratorical Contest. By the end of the season, football had finally become an intercollegiate sport at the University. Now, one hundred and thirty-seven years later, the University of Illinois still thrives, athletically and academically.

Besides athletics, other activities were offered. One activity was theatre. The first theatrical performance was pantomimed and presented to the public on December 5–6, 1872. Just three years later, the first play, "the by-play from A Midsummer Night's Dream," was performed.

"Let Illinois become one of the holy places in the history of human spirit," that was the last statement of Edmund Janes James, the University's fifth president. His words, still today, ring true. [From Roger Ebert, <u>An Illini Century – One Hundred Years of Campus Life</u>; Richard Gordan Moores, <u>Fields of Rich Toil</u>; <u>Mike Pearson</u>, <u>Illini Legends</u>, <u>Lists & Lore</u>, 100 Years of Big Ten Heritage; Winton U. Solberg, <u>The University of Illinois 1867-1894</u>; Winton U. Solberg, <u>The University of Illinois 1867-1894</u>; Winton U. Solberg, <u>The University of The University of Illinois 1894 – 1904</u>; The University of Illinois Press. <u>Illini Years</u>, <u>A Picture History of The University of Illinois.</u>]